P
echnol
3

SEE PAGE 5

C.L. (F.T.) 7353. **Private and Confidential.**

British Engineering Standards Association.

(Incorporated 1918).

Formed in 1901 as The Engineering Standards Committee by—

THE INSTITUTION OF CIVIL ENGINEERS.
THE INSTITUTION OF MECHANICAL ENGINEERS.
THE INSTITUTION OF NAVAL ARCHITECTS.
THE IRON AND STEEL INSTITUTE.
THE INSTITUTION OF ELECTRICAL ENGINEERS.

◆

REPORT TO SUBSCRIBERS

regarding

FORMATION OF LOCAL COMMITTEES

AND

TRANSLATIONS.

UNIVERSITY OF TORONTO
MAY 19 1920
LIBRARY

28 Victoria Street,
Westminster,
London, S.W. 1.

June, 1919.

REPORT

ON

LOCAL COMMITTEES ABROAD AND TRANSLATION OF BRITISH STANDARD SPECIFICATIONS INTO FOREIGN LANGUAGES.

Introduction.

In the autumn of 1916, at the instigation of the late Sir John Wolfe Barry, K.C.B., F.R.S., a scheme was evolved for the purpose of fostering British Engineering trade abroad by promoting the dissemination of British Standards beyond the confines of the United Kingdom. It was decided that steps should be taken towards forming Local Standards Committees, composed in the first instance of British Engineers and Traders in some twelve of the more important trading centres of the world, to act in an advisory capacity to the home Committee and also to disseminate the British Standards Specifications throughout the countries concerned. It was further decided to undertake the translation of the British Standards Specifications into the languages of those countries most likely to use British manufactures, and also to publish all the Association's Reports, whether in the English or foreign text, in octavo size at a reduced uniform price of one shilling net, or its equivalent in foreign currency.

In view of the loss of revenue resulting from this reduction in the price of the British Standard publications and also to meet the initial cost in connection with the formation of Local Committees and the work of translation, a special appeal for funds was addressed to the engineering industry of the country and resulted in the contribution of some £14,000. At the same time, and as a consequence of representation made to the Board of Trade, a Government grant of £10,000 was made towards the expenses of this branch of the Association's activities, on condition that a like sum was contributed by the industry of the country, which condition has been more than fulfilled. So far no provision has been made for recurring expenditure.

Considerable Government assistance has also been given in other directions. The Foreign Office, for instance, has circularised the Consuls in the various countries affected and has consented to their acting as Presidents of the Local Committees, the Executive Chairmanship of the Committee being entrusted to a prominent British engineer in the country in question.

The new Department of Overseas Trade has also closely collaborated with the Association in this work, and H.M. Trade Commissioners have been exceedingly helpful both in furnishing information respecting the countries to which they have recently been accredited, and also by acting unofficially as the Association's emissaries in placing the scheme before the engineers of standing in the different countries.

In regard to the financial aspect of the question it is evident that the recurring expenditure in connection with these Local Committees as well as the translations will greatly exceed the £24,000 originally placed at the disposal of the Association for the purpose.

Moreover, for some little time, and until their value to the industry of the particular country has been demonstrated, these Local Committees cannot be expected to be self-supporting. Their value to the British Industry is, however, unquestionable, for as exemplified by the China Committee, the Local Committees are ready and eager, not only to procure the dissemination of British Standards, but to take up any general questions affecting the development of British trade abroad.

The whole overseas scheme of the Association may, therefore, be looked upon, from one aspect, as a means of advertising British engineering products, and there is no doubt that were even a small proportion of the sum annually spent by manufacturers upon advertisements allocated as subscriptions towards the carrying on of this scheme, it would be greatly to the advantage of British trade generally.

Establishment of Local Committees.

Four Local Committees have now been definitely nominated—namely, in the Argentine, Canada, China and South Africa, and it is hoped that Committees will eventually be formed in Australia, Brazil, India and Spain, in each of which countries preliminary steps are fairly well advanced.

The Argentine.—The Argentine Committee, which is established at Buenos Aires, is under the Presidency of the British Consul, the Executive Chairman being Mr. Frank Foster, M. Inst. C.E., Manager and Chief Engineer of the Buenos Aires Western Railway. This Committee, which is displaying considerable activity, and is assisted by the Chamber of Commerce, has drawn up a very broad programme necessitating fairly heavy recurring expenses, and suggests that at a later date subscriptions from companies and traders in the Argentine might be solicited. It would, however, seem advisable to proceed cautiously in this connection until such time as the value of the work of the Committee is demonstrated to the industry of the country.

For the purposes of propaganda, six thousand copies of the most important British Standard Reports in Spanish have been forwarded to Buenos Aires, together with a large number of copies of a Spanish translation of a report on the aims and objects and general work of the Association.

Canada.—The Canadian Committee, which was originally established as a result of the joint efforts of the Canadian Advisory Committee of the Institution of Civil Engineers and the Canadian Honorary Advisory Council for Scientific and Industrial Research, a recently formed Government Department, has now been incorporated under Dominion Charter as an independent body and is known as the Canadian Engineering Standards Association.

Its functions are similar to those of our own Association in Great Britain. The Chairman is Sir John Kennedy, Dr. J. B. Porter, of McGill University, being the Hon. Secretary, and Captain R. J. Durley, O.B.E., the Secretary. The offices of the Association, which were originally established at Montreal, have been transferred to Ottawa.

The Canadian Government have made an initial grant of 10,000 dollars towards the expenses of this newly formed organisation.

The interests of the British Engineering Standards Association in Canada will be taken care of by this Committee, but so far they have not been able to take any very active steps, as the Government grant has not yet been received. Captain Durley recently read a paper before the Engineering Institute of Canada on the subject of Engineering Standardisation in Great Britain, in which considerable interest was manifested, and, when in England last autumn as the Canadian Delegate to the Inter-Allied Aircraft Conference, Captain Durley attended a meeting of the Overseas Committee of the British Engineering Standards Association which has charge of the activities in connection with this work. At this meeting mention was made of the fact that it was clearly realised that Canada was in a different category from such countries as China and Australia because of the close proximity of the United States of America. The Canadian Engineering Standards Association would doubtless, in certain respects, act and rightly so, as a body independent of the British Engineering Standards Association. At the same time, they would represent the Home Committee, and certainly take every opportunity to familiarise Canadian Engineers with British Standards and the purpose for which the standards exist.

China.—The China Committee, which was elected at a meeting of British Engineers convened at Shanghai by Sir Everard Fraser, K.C.M.G., H.M. Consul General, is under the Chairmanship of Mr. A. C. Clear, the Engineer-in-Chief of the Shanghai-Nanking Railway, H.M. Commercial Councillor to the Legation at Peking being the President. The Committee is a very influential and energetic body, and, in addition to the general work of bringing the British Standards to the notice of all interested throughout China, has taken up several important questions connected with the development of British trade in that country.

Translation of Catalogues into Chinese.—A long report has been received on the subject of the desirability of translating the British Standard Specifications into Chinese. That Committee fully realise the difficulty of translating technical English, but strongly urge that as a commencement trade catalogues be printed in Chinese, as many instances have come to their knowledge where orders have been lost by British firms owing to the fact that the catalogues referred to in the tenders were in English.

Training of Chinese Students in English Workshops.—This Local Committee has also put forward a very strong recommendation that arrangements should be made in this country for training Chinese students in Engineering Colleges and workshops in order that they may be imbued with English ideas, and on their return to China influence the adoption of British methods and practice. The Local Committee points out that for the past ten years a hundred students have every year been educated in the United States—to the great benefit of American trade in China. A report on the whole question, of which a copy has been sent to this Association, has been prepared by the China Committee and forwarded to his Majesty's Minister at Peking by the President of the Local Committee, who emphasizes the desirability for immediate action being taken in the matter. The Local Committee also expresses the hope that the Main Committee in London will do all in their power to bring about the adoption of some such system as they suggest.

South Africa.—In regard to South Africa, before the formulation of the Association's scheme, there already existed a South African Engineering Standards Committee, which has consented to act as our Local Standards Committee for that country.

Although only the four Local Committees named above have been definitely constituted, much preparatory work has been done in the case of the other selected trading centres, and, as already mentioned, several Local Committees are on the point of being nominated.

Australia.—In Australia, H.M. Trade Commissioner has approached the Commonwealth Advisory Council of Science and Industry on behalf of this Association. The Council itself has outlined a scheme embracing a considerable amount of standardisation, and is lending its support to the general idea of close co-operation with the Mother Country in these matters. The various State-Committees of the Advisory Council have called representative meetings to discuss the matter with a view to reporting thereon to the Executive Committee of the Council. At the Victoria meeting, resolutions were passed to the effect that it is desirable to establish in Australia a representative authoritative body to take in hand the work of engineering standardisation, and that such a movement should be closely linked up with the British Engineering Standards Association. The Association will therefore shortly be in direct contact with a thoroughly representative Committee acting as its Local Agent.

Arrangements have already been made with a bookseller in Melbourne to undertake the sale of the British Standard Specifications, and a stock of these, together with a large number of copies of a report on the general work of the Association for propaganda purposes have been sent out.

India.—The Government of India cordially approves the proposal to establish a permanent Local Committee in India and is taking steps to consult the various Local Governments, Engineering Societies and Chambers of Commerce with a view to setting up a thoroughly representative body which will be in direct touch with this Association through the India Office. We have also had communications from prominent Engineers resident in India of a very encouraging nature and containing promises of active assistance.

Brazil.—In Brazil, the British Chamber of Commerce at Rio and also the Chamber at São Paulo have taken up the matter, and it is hoped that their collaboration will shortly result in the nomination of a Local Committee for Brazil.

On the advice of the Secretary of the Rio Chamber, who informs us that the Inspector of Railways to the Brazilian Government is considering the adoption of American Standard Specifications for Railway Material, a number of copies of the British Standard Specification, No. 24, Railway Rolling Stock Material, have been forwarded to the Chamber.

Spain.—In regard to Spain, much preparatory work has been carried out on behalf of the Association by Mr. C. A. Friend, M. Inst. C.E., of Seville, and a list of the names of engineers willing to form a Spanish Local Committee has been got together. There has been a little delay, however, in the actual nomination of the Committee owing to the difficulty of deciding which city should be the seat of its headquarters.

At the recent Engineering Congress held in Madrid, Mr. Friend read a report on the work of the Association, a number of copies of which, translated into Spanish, had previously been sent out to him.

Chili and Portugal.—In regard to Chili and Portugal, the names of English Engineers of high standing who would be willing to undertake the organisation of a Local Committee have been furnished by the respective Consuls, and negotiations are proceeding satisfactorily.

Peru.—In regard to Peru, no communication has been received from the Consul, to whom, however, as in the case of the other Consuls, the Foreign Office presumably addressed a memorandum on the subject of the Association's Overseas Scheme, but through the kindness of one of the members of the Oveaseas Committee, the assistance of Brig. General A. J. Cooper, who recently left London to take up an appointment as Director of the Peruvian Corporation, has been secured. The newly appointed Trade Commissioner for Peru will also take up the matter upon his arrival in that country.

Uruguay.—In regard to Uruguay, no reply has yet been received from any of the Engineers who have been communicated with on the subject.

Translation of the British Standard Specifications.

Spanish.—Eighteen British Standard Specifications, principally for heavy material, have been printed in Spanish. A large number of copies of those likely to be of use to British trade in South America have been sent to Buenos Aires. Fourteen other Specifications have been translated into Spanish, but have not been printed, as the English text of the Reports in question is under revision. Four other Specifications are in course of translation.

Portuguese.—Thirteen British Standard Specifications have been selected for translation into Portuguese, of which ten are already in type.

Italian.—Seventeen British Standard Specifications have been translated into Italian, and arrangements are being made with a well known bookseller, Messrs. Hoepli, of Milan, for placing these Reports on sale in Italy, and also for a certain amount of free distribution. The translation of two other reports is nearing completion, and three reports are in course of translation.

French.—A large number of the Association's Reports have been translated into French by various French-speaking engineers, but will need co-ordination and revision by some competent authority before they can be issued. Report No. 72, British Standardisation Rules for Electrical Machinery, has been published in French, and arrangements are being made for its sale in Paris.

28 Victoria Street, Westminster,
London, S.W. 1.

June, 1919.

MAIN COMMITTEE.

SIR ARCHIBALD DENNY, BART. (*Chairman*).

SIR MAURICE FITZMAURICE, C.M.G. (*Vice-Chairman*).

Sir William Ellis, G.B.E. Sir Robert Elliott-Cooper, K.C.B. Sir William Matthews, K.C.M.G. Sir Douglas Fox. Alexander Ross, Esq. Dr. W. C. Unwin.	Nominated by the Institution of Civil Engineers.
Sir Vincent L. Raven, K.B.E. H. A. Ivatt, Esq. Dr. William H. Maw.	Nominated by the Institution of Mechanical Engineers.
G. Ainsworth, Esq. Dr. Arthur Cooper. Illtyd Williams, Esq.	Nominated by the Iron and Steel Institute.
Sir Thomas Bell, K.B.E. Sir William Smith, C.B.	Nominated by the Institution of Naval Architects.
Sir John Snell. Colonel R. E. Crompton, C.B. C. P. Sparks, Esq.	Nominated by the Institution of Electrical Engineers.
F. R. Davenport, Esq. F. W. Gilbertson, Esq.	Co-opted by the nominated members to represent the Federation of British Industries.
Hon. Sir Charles Parsons, K.C.B. Sir Robert Hadfield, Bart. Sir Richard Glazebrook, C.B.	Co-opted by the nominated members.

DR. J. H. T. TUDSBERY (*Hon. Secretary*).

MR. C. LE MAISTRE (*Secretary*).

Telephone {Vict. 3127
3128

Offices of the Association
28 VICTORIA STREET,
WESTMINSTER,
S.W. 1

A number of the Publications of the Association are being issued in French, Italian, Spanish and Portuguese. The majority of the English Editions and all the Foreign Translations (which also include the English Text) are being published in octavo form, and will be available at 1/- net per copy or its equivalent in foreign moneys.

ENGLISH EDITIONS.

Report No.		Net.	Post free.
1—1914.	**Rolled Sections for Structural Purposes,** Lists of	1/-	1/2
2—1903.	**Tramway Rails and Fishplates,** Specification and Sections of	1/-	1/3
3—1903.	**Influence of Gauge Length and Section of Test Bar on the Percentage of Elongation,** Report on. By Professor W. C. Unwin, F.R.S.	1/-	1/2
6—1904.	**Rolled Sections for Structural Purposes,** Properties of ...	1/-	1/3
7—1910.	**Copper Conductors,** Tables of	1/-	1/2
8—1904.	**Tramway Poles,** Specification for Tubular	1/-	1/2
9—1909.	**Railway Rails,** Specification and Sections of Bull Head... ...	1/-	1/3
10—1904.	**Pipe Flanges,** Tables of	1/-	1/2
11—1909.	**Railway Rails,** Specification and Sections of Flat Bottom ...	1/-	1/4
12—1915.	**Portland Cement,** Specification for	1/-	1/2
13—1910.	**Steel for Shipbuilding,** Specification for Structural	1/-	1/2
14—1907.	**Steel for Marine Boilers,** Specification for Structural	1/-	1/2
15—1912.	**Steel for Bridges,** etc., and General **Building Construction,** Specification for Structural...	1/-	1/2
16—1905.	**Telegraph Material,** Specifications for ...	1/-	1/3
18—1910.	**Tensile Test Pieces,** Forms of	Gratis	-/2
21—1909.	**Pipe Threads** for Iron or Steel Pipes and Tubes, Report on ..	1/-	1/2
23—1905.	**Trolley Grove and Wire,** Standards for	1/-	1/2
24—1911.	**Railway Rolling Stock,** Specifications for **Material** used in the Construction of		
	Part I.—1911. Locomotive, Carriage and Wagon Axles ...	1/-	1/2
	,, II.—1911. Locomotive, Carriage and Wagon Tyres ...	1/-	1/2
	,, III.—1911. Laminated, Volute and Helical Springs, and Steel for Laminated Springs...	1/-	1/2
	,, IV.—1911. Steel Forgings, Blooms and Castings	1/-	1/2
	,, V.—1911. Copper Plates, Rods and Tubes, and Brass Tubes	1/-	1/2
	,, VI.—1911. Steel Plates, Angles, etc., and Rivets for Locomotives, Carriages and Wagons ..	1/-	1/2
27—1906.	**Limit Gauges for Running Fits,** Report on Standard Systems of	1/-	1/2
28—1908.	**Nuts, Bolt Heads and Spanners,** Report on	1/-	1/2
29—1909.	**Steel Forgings for Marine Purposes,** Specification for Ingot	1/-	1/2
30—1907.	**Steel Castings for Marine Purposes,** Specification for... ...	1/-	1/2
31—1910.	**Steel Conduits for Electrical Wiring,** Specification for ...	1/-	1/2
32—1907.	**Steel Bars** for use in **Automatic Machines,** Specification for	1/-	1/2

Report No.		Net.	Post Free.
35—1907.	**Copper Alloy Bars,** for use in **Automatic Machines,** Specification for	1/-	1/2
37—1919.	**Electricity Meters,** Specification for...	1/-	1/2
40—1908.	**Cast Iron Low Pressure Heating Pipes,** Specification for Spigot and Socket	1/-	1/2
41—1908.	**Cast Iron Flue or Smoke Pipes,** Specification for Spigot and Socket	1/-	1/2
42—1909.	**Steam Engines for Electrical Purposes,** Report on Reciprocating	1/-	1/2
43—1909.	**Boiler Tubes,** Specification for Charcoal **Iron** Lapwelded ...	1/-	1/2
44—1909.	**Cast Iron Pipes for Hydraulic Power,** Specification for ...	1/-	1/2
45—1917.	**Sparking Plugs,** (for Internal Combustion Engines). Report on Dimensions for	1/-	1/2
46—1909.	**Keys and Keyways,** Specification for	1/-	1/2
47—1919.	**Steel Fishplates,** for Bull Head and Flat Bottom Railway Rails, Specification and Sections of	1/-	1/3
48—1909.	**Wrought Iron** of Smithing Quality for Shipbuilding (Grade D), Specification for	1/-	1/2
49—1909.	**Ammeters and Voltmeters,** Specification for	1/-	1/2
50—1910.	**Locomotives for Indian Railways,** Third Report on (Superseding Nos. 5 and 26)	Under Revision.	
51—1913.	**Wrought Iron,** for use in Railway Rolling Stock ("Best Yorkshire" and Grades A, B and C), Specification for	1/-	1/2
53—1913.	**Boiler Tubes** for Locomotive Boilers, Specification for Cold Drawn Weldless **Steel**	1/-	1/2
54—1911.	**Screw Threads, Nuts and Bolt Heads** for use in **Automobile** Construction, Report on...	1/-	1/2
55—1911.	**Copper and Bronze Wire,** Report on Hard Drawn	1/-	1/3
56—1911.	**Yield Point** and **Elastic Limit,** Definitions of	Gratis	-/2
57—1911.	**Small Screws,** Report on Heads for	1/-	1/2
58—1912.	**Cast Iron Soil Pipes,** Specification for Spigot and Socket ...	1/-	1/2
59—1912.	**Cast Iron Waste and Ventilating Pipes** (for other than Soil Purposes), Specification for Spigot and Socket	1/-	1/2
61—1913.	**Copper Tubes** and their **Screw Threads** (primarily for domestic and similar work), Specification for	1/-	1/2
62—1913.	**Marine Boiler Stays, Screwing** for	Gratis	-/2
63—1913.	**Broken Stone and Chippings,** Specification for Sizes of ...	1/-	1/2
64—1913.	**Fishbolts and Nuts** for Railway Rails, Specification for	1/-	1/2
65—1914.	**Salt-Glazed Ware Pipes,** Specification for	1/-	1/2
66—1914.	**Copper-Alloy Three-Piece Unions** (for Low and Medium Pressure Screwed Copper Tubes), Specification for	1/-	1/3
67—1914.	**Ceiling Roses,** Specification for Two- and Three-Plate	1/-	1/2
68—1914.	**Steel Conductor Rails,** Method of Specifying the **Resistance** of	1/-	1/2
69—1915.	**Tungsten Filament Glow Lamps** (Vacuum Type) for **Automobiles,** Report on	1/-	1/2
70—1915.	**Pneumatic Tyre Rims** for Automobiles, Motor Cycles and Cycles, Report on	1/-	1/2
71—1917.	**Wheel Rims and Tyre Bands for Solid Rubber Tyres for Automobiles,** Report on Dimensions of	1/-	1/2

Report No.		Net.	Post free.
72—1917.	Electrical Machinery, British Standardisation Rules for	1/-	1/2
73—1915.	Wall Plugs and Sockets, Specification for	1/-	1/2
74—1917.	Charging Plug and Socket, for Vehicles propelled by Electric Secondary Batteries, Specification for	1/-	1/2
75—1916.	Steels for Automobiles, Specifications for Wrought	1/-	1/2
76—1916.	Tars, Pitches, Bitumens and Asphalts when used for Road Purposes. Report on Nomenclature of, and Specifications for Tar and Pitch for Road Purposes	1/-	1/2
77—1916.	Electrical Pressures for New Systems and Installations (Low and Medium Pressures)	Gratis	-/2
78—1917.	Cast Iron Pipes and Special Castings for Water, Gas and Sewage, Specification for	1/-	1/2
80—1917.	Magnetos for Automobile Purposes, Report on Dimensions of	1/-	1/2
82—1919.	Starters for Electric Motors, Specifications for	1/-	1/2
83—April, 1918.	Dope and Protective Covering for Aircraft, Standard of Reference for	1/-	1/2
84—1918.	Screw Threads, British Standard Fine and their Tolerances (Superseding parts of Reports Nos. 20 and 38), Report on	1/-	1/2
85—April, 1918.	Steel for Aircraft for Government Purchases in the United States of America, Specifications for	Under Revision.	
86—1919.	Magnetos for Aircraft Purposes, Report on Dimensions of	1/-	1/2
87—1919.	Air Screw Hubs, Report on Dimensions of	1/-	1/2
88—1919.	Electric Cut-outs. Low Pressure (Type O), Specification for	1/-	1/2
103—1919.	Falling Weight Testing Machines for Rails, Specification for	Gratis	-/2

INTERIM REPORTS.

		Net.	Post free.
C. L. 2582	Ball Journal Bearings for Automobiles. Interim Report on Sizes of Single Row	Gratis	-/2
C.L. 3750	French Metric Screw Threads for Aircraft Purposes	-/6	-/8
C.L. 7130	Annealed Copper Conductors for Electric Power and Light, British Standards for	Gratis	-/2
C.L. 7270	Screw Threads, British Standard Whitworth and their Tolerances (superseding Nos. 20 and 38), Interim Report on	1/-	1/2
C.L. 7271	Screw Threads, British Association with Tolerances for sizes Nos. 0 to 15 B.A. (superseding No. 20), Interim Report on	1/-	1/2

FOREIGN TRANSLATIONS.

The following Foreign Translations of the Association's Specifications and Reports are now available.

FRENCH.

Report No.		Net.	Post free Abroad.
72—1917.	Electrical Machinery, British Standardisation Rules for	1/-	1/4

ITALIAN.

Report No.		Net.	Post free Abroad.
13—1910.	Steel for Shipbuilding, Specification for Structural	1/-	1/4
14—1907.	Steel for Marine Boilers, Specification for Structural	1	1/4
15—1912.	Steel for Bridges, etc., and General Building Construction, Specification for Structural	1/-	1/4

Report No.		Net.	Post free Abroad.
24—1911.	**Railway Rolling Stock,** Specifications for **Material** used in the Construction of		
	Part I.—1911. Locomotive, Carriage and Wagon Axles ...	1/-	1/4
	,, II.—1911. Locomotive, Carriage and Wagon Tyres ...	1/-	1/4
	,, III.—1911. Laminated, Volute and Helical Springs, and Steel for Laminated Springs	1/-	1/4
	,, IV.—1911. Steel Forgings, Blooms and Castings ...	1/-	1/4
	,, V.—1911. Copper Plates, Rods and Tubes, and Brass Tubes...	1/-	1/4
	,, VI.—1911. Steel Plates, Angles, etc., and Rivets for Locomotives, Carriages and Wagons	1/-	1/4
29—1909.	**Steel Forgings for Marine Purposes,** Specification for Ingot	1/-	1/4
30—1907.	**Steel Castings for Marine Purposes,** Specification for... ...		
43—1909.	**Boiler Tubes,** Specification for Charcoal **Iron** Lapwelded ...	1/-	1/4
45—1917.	**Sparking Plugs** (for Internal Combustion Engines), Report on Dimensions for		
51—1913.	**Wrought Iron** for use in Railway Rolling Stock. ("Best-Yorkshire" and Grades A, B and C), Specification for	1/-	1/4
53—1913.	**Boiler Tubes** for Locomotive Boilers, Specifications for Cold Drawn Weldless **Steel**	1/-	1/4
71—1917.	**Wheel Rims and Tyre Bands for Solid Rubber Tyres for Automobiles,** Report on Dimensions of	1/-	1/4
75—1916.	**Steels** for **Automobiles,** Specifications for **Wrought**	1/-	1/4

SPANISH.

Report No.		Net.	Post free Abroad.
12—1915.	**Portland Cement,** Specification for	1/-	1/4
13—1910.	**Steel for Shipbuilding,** Specification for Structural	1/-	1/4
14—1907.	**Steel for Marine Boilers,** Specification for Structural	1/-	1/4
15—1912.	**Steel for Bridges,** etc., and General **Building Construction,** Specification for Structural	1/-	1/4
24—1911.	**Railway Rolling Stock,** Specifications for **Material** used in the Construction of		
	Part I.—1911. Locomotive, Carriage and Wagon Axles ...	1/-	1/4
	,, II.—1911. Locomotive, Carriage and Wagon Tyres ...	1/-	1/4
	,, III.—1911. Laminated, Volute and Helical Springs, and Steel for Laminated Springs	1/-	1/4
	,, IV.—1911. Steel Forgings, Blooms and Castings ...	1/-	1/4
	,, V.—1911. Copper Plates, Rods and Tubes, and Brass Tubes	1/-	1/4
	,, VI.—1911. Steel Plates, Angles, etc., and Rivets for Locomotives, Carriages and Wagons	1/-	1/4
29—1909.	**Steel Forgings for Marine Purposes,** Specification for Ingot	1/-	1/4
30—1907.	**Steel Castings for Marine Purposes,** Specification for... ...	1/-	1/4
43—1909.	**Boiler Tubes,** Specification for Charcoal **Iron** Lapwelded ...	1/-	1/4
48—1909.	**Wrought Iron** of Smithing Quality for Shipbuilding (Grade D) Specification for	1/-	1/4
51—1913.	**Wrought Iron** for use in Railway Rolling Stock ("Best-Yorkshire" and Grades A, B and C), Specification for	1/-	1/4
53—1913.	**Boiler Tubes,** for Locomotive Boilers, Specification for Cold Drawn Weldless **Steel**	1/-	1/4

Report No.		Net.	Post free Abroad.
72—1917.	**Electrical Machinery,** British Standardisation Rules for... ...	1/-	1/4
75—1916.	**Steels** for **Automobiles,** Specifications for **Wrought**	1/-	1/4

PORTUGUESE.

In course of preparation.

12—1915.	**Portland Cement,** Specification for	1/-	1/4
15—1912.	**Steel for Bridges,** etc., and General **Building Constructton,** Specification for Structural	1/-	1/4
24—1911.	**Railway Rolling Stock,** Specification for **Material** used in the Construction of		
	Part I.—1911. Locomotive, Carriage and Wagon Axles ...	1/-	1/4
	,, II.—1911. Locomotive, Carriage and Wagon Tyres ..	1/-	1/4
	,, III.—1911. Laminated, Volute and Helical Springs, and Steel for Laminated Springs	1/-	1/4
	,, IV.—1911. Steel Forgings, Blooms and Castings ...	1/-	1/4
	,, V.—1911. Copper Plates, Rods and Tubes, and Brass Tubes	1/-	1/4
	,, VI.—1911. Steel Plates, Angles, etc., and Rivets for Locomotives, Carriages and Wagons	1/-	1/4
70—1915.	**Pneumatic Tyre Rims** for Automobiles, Motor Cycles, and Cycles, Report on	1/-	1/4
71—1917	**Wheel Rims and Tyre Bands for Solid Rubber Tyres for Automobiles,** Report on Dimensions of	1/-	1/4
72—1917.	**Electrical Machinery,** British Standardisation Rules for ...	1/-	1/4
73—1915.	**Wall Plugs and Sockets,** Specification for	1/	1/4
75—1916.	**Steels** for **Automobiles,** Specification for **Wrought**	1/	1/4

NOTE.—*The Inland Postage for the above translations is* 2*d. per copy.*

28 VICTORIA STREET, WESTMINSTER,
LONDON, S.W. 1.

Gaylard & Son Printers, London, S.E. 14.